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Executive Development

Daily Staffing Alternatives for East Cleveland, Ohio Fire Department

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CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

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Abstract

Faced with declining revenue, the City of East Cleveland, Ohio, was unable to maintain daily fire department staffing in accordance with National Fire Protection Association and its own historical standards. Descriptive research identified alternatives to the department's daily staffing by examining East Cleveland's staffing cost factors and comparing them with those of other like organizations, determining how other like organizations reconcile declining revenue with unchanging workload, and assessing the level of fire service preferred by the East Cleveland community and its elected officials and their willingness to pay for it. A literature review and survey of East Cleveland area fire departments pointed to the widespread use of management policy in establishing minimum daily staffing that incorporated part-time and full-time employees, and that utilized automatic response agreements with neighboring fire departments. Recommendations included eliminating the minimum staffing clause from East Cleveland's fire department labor agreement, including part-time firefighters in daily staffing and entering into automatic response agreements with neighboring fire departments.

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Introduction

With city revenue declining relative to inflation, East Cleveland is unable to provide daily staffing for fire and emergency medical response in accordance with National Fire Protection Association and its own historical standards, thus jeopardizing firefighter and citizen safety and property protection. Descriptive research identified a long-term solution to the staffing problem by answering four questions:

What factors affect the cost of daily staffing in East Cleveland Fire compared to other fire and non-fire organizations?

How do other fire and non-fire organizations reconcile stagnant or declining revenue with unchanging or increased workload?

Given factual information regarding fire and emergency medical services, what is the East Cleveland community's preferred level of service and willingness to pay?

Given factual information regarding fire and emergency medical services, what is the elected city officials' preferred level of service and willingness to pay?

Background and Significance

The Development of East Cleveland and its Fire Department

The village of East Cleveland in 1899 created a volunteer fire department to serve the community's fire protection needs (City of East Cleveland, 1901, p. 76). A Cleveland suburb of three square miles, East Cleveland grew rapidly from 2,757 people in 1900 to 39,667 in 1930 (United States Census, 1970, vol. 1, p. 37-19). The fire department grew apace and by 1914 had transitioned to a department staffed entirely by career members (City of East Cleveland, 1914, p. 1). The community's physical structure also quickly expanded during the first three decades of the 20th Century, most residential and commercial buildings dating from that era. While mainly

a residential community, the city had a commercial district and several light manufacturing businesses. East Cleveland's population peaked at 40,047 in 1950 (United States Census, 1970). During the succeeding decade, the fire department grew to 50 members organized into three platoons, each working 24-hour shifts.

The 1960s, however, ushered in an era of demographic and financial change for East Cleveland's residents. Historically a middle- and upper middle-class suburb, the proportion of the city's residents living in poverty increased to 13% by 1970 (United States Census, 1970, vol. 1, p. 37-686). According to department annual reports, the yearly number of fire department emergency responses steadily increased, from 487 non-emergency medical runs, of which 177 were fires, in 1960 to 1,946 runs with 414 fires in 1970 (City of East Cleveland, 1961, 1971). In addition, the department went from a yearly average of fewer than 300 emergency medical runs in the 1950s to over 2,500 per year by 1970 (City of East Cleveland, 1978, pp. 5-6). The trend of urban change, and its increasing demand on the fire department, continued through the next 30 years. The census reported East Cleveland's population dropped to 27,217 in 2000, of which 32% were in poverty, and estimated a further decline in population to 25,213 in 2006. The census also reported a drop in housing stock, from 15,884 housing units, with a vacancy rate of 6%, in 1980, to 13,491 units, with a 20% vacancy rate, in 2000 (United States Census, 1980, vol. 1, p.37-98, Cuyahoga County Planning Commission, 2008, *Housing*). Despite the decrease in population and housing stock, fire department emergency runs increased to 5,556 in 2007, 4,540 of which were for emergency medical service (EMS) (City of East Cleveland, 2007).

Financial Challenges

The decline in population and physical property coupled with the increase in poverty has been mirrored in the city's tax base and revenue collection. From 1998 to 2007 the city's total

assessed property valuation increased only 18% during a period when the value of all property in the county rose 25% (Cuyahoga County Budget Commission, 2008a). However, calculations using the United States Bureau of Labor Statistics inflation calculator (2008) show, when inflation is considered, East Cleveland's valuation actually *declined* 7%. Inflation-adjusted property tax *revenue decreased* 11% from 1999 to 2007 (Cuyahoga County Budget Commission, 2008b).

Income tax revenue also was affected negatively. In nominal dollars income tax collections were flat from 1999 to 2002, the most recent year audited (Ohio Auditor of State, 2001, p. 8, 2006, p. 10). Adjusted for inflation, however, income tax receipts actually *decreased* 7.5% during the period. The auditor reported (2001, p. 8, 2006, p. 10) general fund revenue, out of which came the fire department budget, also was flat in nominal dollars. Inflation-adjusted dollars, though, *decreased* 6.9%. This negative financial trend continued to the present year. The city's 2008 general fund budget is \$18.9 million (City of East Cleveland, 2008), which is an inflation-adjusted decrease of 8% from 1999.

Income from ambulance transport fees, the fire department's main source of non-tax revenue, also decreased in recent years as reported annually by the city's medical billing company, from \$631,675 in 2004 to \$394,468 in 2007 (Life Force Management, 2004, 2007). Additionally, the economic status of the city's residents negatively impacts transport fee collection rate. Life Force reported the rate declined from 40% of billings in 2004 to 31% in 2007. In 2006 the average collection rate of all Life Force medical clients was 70% and the company attributed East Cleveland's low rate to the high percentage of Medicaid and uninsured patients the department transported (C. Knapp, personal communication, February 14, 2006). Collectively Life Force clients averaged 7% Medicaid patients (Knapp), while East Cleveland's rate was 30%, a rate that

has held steady since then (Life Force, 2007). Life Force reported uninsured patients increased from 21% in 2004 to 29% in 2007.

City officials and residents show little enthusiasm for increasing city revenue through tax or fee increases. According to the Regional Income Tax Agency (2008) and the Cleveland Finance Department (2008), of 59 local communities in Cuyahoga County, only one has an income tax rate higher than East Cleveland's, and East Cleveland is the only local jurisdiction in the county that does not extend an income tax credit to its residents working in other communities. Council recently declined to put on the ballot a safety forces operating levy and, in a 2006 referendum, citizens repealed a water rate increase that council had passed the previous year. From 1988 to 2006, the city was in a state of fiscal emergency declared by the state auditor. Upon its release from fiscal emergency, the mayor opined that the city, given its poor financial health, could soon find itself under that designation again ("East Cleveland's," 2006).

Effect on the Community's Fire Department and Emergency Medical Service

The city's declining fiscal health affected fire department operations. In 1978, the Ohio Department of Health awarded the department a grant for the purchase and equipping of two new ambulances to replace the department's single, nine-year-old vehicle and to meet the increased need for emergency medical response (Ohio Department of Health, personal letter to East Cleveland city manager, September 20, 1978). However, according to the department's executive assistant, the city was unable to fund the required match and the additional personnel to staff the second unit (J. Banning, personal communication, March 20, 2008). He also stated the department, strained already by increased fire activity, in 1978 ceased altogether to provide EMS. The city instead contracted with a private ambulance firm for EMS, but ceased the arrangement for lack of funds in 1982 (Beard, 1982). Later that year the local hospital started to

provide EMS for the community.

The fire department's ability to manage tight financial resources was, and is still, influenced by a daily minimum-staffing clause in the labor agreement with the firefighters' union (City of East Cleveland, 1985). What had been a department policy of twelve firefighters on duty each day became a contractual requirement. The contract compelled the city to maintain this daily staffing with overtime, if necessary. In 1991, the city increased the department from 50 members to 53 in an attempt to save money from the overtime necessary to cover days off, vacations, training assignments and sick leave. The cost of a firefighter includes not only pay, but fringe benefits as well. The 2007 base salary of a veteran firefighter was \$40,457 (City of East Cleveland, 2004), but benefits brought the total cost to \$67,431. After factoring in contractual paid time-off, the average veteran firefighter was present for duty for 2,112 hours, which made the total hourly cost \$31.93. The more expensive benefits were the city's retirement contribution (28.7% of salary, or \$11,835) and health benefits (\$11,676). Although East Cleveland firefighter base salaries are \$15,000 to \$20,000 lower than those in other Cleveland area departments, in 2005 personnel salary and benefits costs made up 95% of the department's total expenditures and in 2006 they constituted 97% (City of East Cleveland, 2005, 2006b).

The city's financial situation was further exacerbated in 2001 when the local hospital discontinued the city's EMS (Ott, 2002b). Absent another provider, the city created a Division of EMS and staffed two ambulances with two paramedics each. In 2002, though, the city's finances compelled it to reduce expenditures by laying off seven firefighters and breaking the labor agreement's minimum staffing clause (Tinsley, 2002). At times as few as eight firefighters were on duty (Ott, 2002a) and the union grieved the violation of its contract (American Arbitration Association, 2002). Eventual settlement of the grievance in 2003 called for the firefighters to

take over EMS and the city to increase daily minimum staffing by 2, to a total of 14 (American Arbitration Association, 2003). The city then laid off the EMS employees (Ott & Tinsley, 2003). In 2006, again for financial reasons, the city entered into negotiations with the union for a reduction in the number of firefighters to be on duty each day (American Arbitration Association, 2006). Unable to reach an agreement, the city hired part-time firefighters to meet the contract's minimum staffing clause, thus eliminating overtime for the career firefighters. The union filed a grievance over this use of part-time firefighters (American Arbitration Association, 2006) and obtained an injunction against their use pending settlement of the grievance (East Cleveland Firefighters v. City of East Cleveland, 2006). Resumed negotiations resulted in an agreement reducing the minimum daily staffing of bargaining unit members to 12 and allowing the city to hire up to six part-time (non-bargaining unit) firefighters (City of East Cleveland, 2006a). The agreement did not compel the city to use part-time firefighters and, in any case, their use did not count toward the minimum staffing number of 12. Depending on the availability of part-time personnel, total daily staffing of two engine companies, one truck company, two ambulances and a command vehicle on occasion fell to this minimum. When an emergency incident requires more personnel than are on duty, East Cleveland relies on mutual aid from individually summoned departments or the activation of a county-wide mutual aid box alarm system, which summons a pre-determined response from several departments.

Purpose of the Research

The daily staffing of 12 firefighters fails to meet the requirements of National Fire Protection Association (NFPA) Standard 1710 (2004), a failure that jeopardizes firefighter and citizen safety, and property protection. It also hinders East Cleveland's ability to qualify for a federal Staffing for Adequate Fire and Emergency Response grant (J. Goodrick, personal

communication, August 25, 2007). The trend of declining city revenue, which shows no sign of reversing in the future, makes an increase in fire department daily staffing unlikely and even jeopardizes the current level. This challenge of providing adequate daily staffing within the bounds of available financial resources is not an emerging issue unique to East Cleveland, but is “an ever increasing challenge” for the modern fire department (Wren, 1995, p. 53).

The research, which met the National Fire Academy’s Executive Development course goal of leading by the application of research findings, found alternatives to meeting the staffing requirements of NFPA 1710 by identifying factors affecting the cost of daily staffing compared to other fire and non-fire organizations, identifying how other fire and non-fire organizations reconcile stagnant or declining revenue with unchanging or increased workload, and identifying the East Cleveland community’s willingness to increase taxes to support fire department staffing.

Literature Review

Fire Service Staffing Standards and Community Expectations

Although the research was not to develop new information to help answer the question of what constitutes adequate staffing for a fire department, research concerning the financial cost of firefighter staffing cannot ignore completely the task of establishing the number of personnel needed to do the desired work. Lewis and Molloy (1991) reported labor experts define minimum staffing as “the fewest number of individuals needed to run an office or worksite effectively and efficiently” (p. 21). England, Morgan and Pelissero (2007) defined effectiveness as the extent to which goals are being met . . . [or] the desired outcome is being fulfilled,” and efficiency as the amount of resources necessary to obtain the intended result (p. 186). Coleman (2006) succinctly framed the topic for the fire service when he asked the question, “How much fire

can a firefighter fight . . . if a firefighter could fight fire?” (p. 32). Coleman (2007, January) acknowledged the ongoing debate concerning this question:

Despite the fact that people have been writing about fire protection for some 300 years, I have yet to run across anyone who has come up with a strong, accurate rule of thumb about how much is too much and how little is too little. (p. 36)

Coleman (2007, August) further identified the challenge of providing EMS without lessening the ability of the fire-response system. NFPA 1710 (section 5.2.4) offers direction by requiring a substantially career fire department to have an initial full alarm assignment totaling no fewer than 14 firefighters (15 if an aerial is used), with the first engine company arriving within four minutes and the full alarm assignment arriving within eight. Section 5.2.3.1.1 calls for engine companies to be staffed with four on-duty personnel. Section 5.2.1.2 permits the fire department to use “established automatic mutual aid and mutual aid agreements” to comply with these requirements. Section 5.3.3.4.4 requires two paramedics and two basic emergency medical technicians to respond to each emergency needing advanced life support.

England et al. (2007) identified the provision of services as being a major function of local government and available finances as playing a critical role in the ability of government to provide them. They further found budgetary pressures have compelled city officials to operate more efficiently through the reshaping or discontinuation of programs. At the same time, they recognized local government’s goal of meeting citizen service demands and expectations (p. 186). Marinucci (1995) admitted community politics affects the staffing of a fire department. In Greenshields (2002), Ottawa, Canada, city council member Diane Deans summed up the interrelation between community expectations and funding: “In a fire department it’s all about limiting risk. The more money that you are prepared to spend, the less risk you will have in the

community. It's all balance between money and risk" (p. 82). Smeby (2006) recognized the "political baggage" that comes with certain policy decisions, especially those that are controversial (p. 130). Coleman (2006) also emphasized the need for community support in determining fire department staffing.

Fire Department Staffing Arrangements and Costs

Moulder (2006) found of 966 fire departments surveyed in 2005, personnel expenditures for salaries and benefits averaged 91% of total department costs, and averaged 88% for departments serving communities with from 25,000 to 49,999 population (pp. 132-33). She concluded workforce composition especially affects personnel costs of fire departments, with all-volunteer departments having personnel expenses about 98% lower than those whose composition includes full-time personnel. Moulder also found the 271 surveyed departments serving communities with 25,000 to 49,999 population had a roster average of 1.49 full-time firefighters per 1,000 population (p. 127). NFPA (2006) found of 30,635 United States fire departments, only 8% were composed entirely of career members.

When he heard of research that examined, among other things, East Cleveland using other than full-time firefighters for daily staffing, a veteran officer of volunteer and combination departments exclaimed, "Are you nuts?" (R. Browning, personal communication, October 18, 2007). In his mind, combination fire staffing was used only by communities that were in transition from purely volunteer to career departments, and certainly not by a busy urban department with a 100-year history of being staffed entirely with career firefighters. Indeed, the International Association of Fire Chief's *Red Ribbon Report* (Scott et al., 2005) examined at length this traditional transformation from volunteer to career department. In its final section, however, the report asked, "Reverse transitioning: Is it too late to turn back?" (p. 24). It

concluded that reverse transitioning, or moving from a fully career department to a combination system, might be appropriate when budgetary shortfalls lead to, among other things, reduced minimum staffing levels and overall staff reductions (p. 24-25). The report also recognized that stations staffed with part-time members “allows for staffing that is comparable to that of the career department at a fraction of the cost to the community” (p. 17).

One Department’s Use of Non-Career Personnel

In an interview to determine the challenges and benefits of a fire department using non-career staffing, G. Goodrich, chief of the Fairlawn, Ohio, Fire Department (personal communication, April 16, 2008), identified the reasons his department settled on a minimum daily staffing composed of both full-time and part-time firefighters, augmented by automatic response agreements. Twenty years ago the department relied on a handful of full-time members staffing the station and on-call volunteers. The volunteers also occasionally worked station shifts, for which they were paid. However, volunteer turnover was high. Many took full-time jobs with other fire departments, making their on-call responsibilities difficult to fulfill. Fairlawn was losing trained personnel and constantly training new members to take their place. Starting in the early 1990s, the department eliminated the on-call arrangement and transitioned exclusively to a station staffing composed of full-time and part-time personnel. Department policy is to have at least five members on duty at all times, but at management’s discretion staffing may fall to four before a member is scheduled on overtime. Fairlawn’s staffing is designed to handle two simultaneous emergency calls, each requiring no more than one ambulance or fire engine. For additional simultaneous emergency calls, Fairlawn uses mutual aid. For a report of a building fire, Fairlawn uses an automatic response arrangement with neighboring departments. A building fire automatically triggers a response of an engine, ladder and ambulance from Fairlawn, and two

engines, a rapid intervention team and a battalion chief from three bordering departments, a total of 15 or 16 personnel.

Goodrich stated part-time scheduling attracts employees who have full-time jobs with other departments or private ambulance companies, or who are entering the fire service with a view to a future career. For its part, Fairlawn uses the part-time employment to evaluate these people for suitability for full-time positions when openings occur. Part-time members may take a civil service test to be classified as an Intermittent Firefighter/EMTP, which is still a part-time position. However, Fairlawn then considers full-time employment to be a promotion and opens the civil service test for full-time firefighter to only its intermittent firefighters. In this manner Fairlawn hires only trained and experienced applicants with whom it is familiar.

Fairlawn's staffing arrangement was driven more by the need for obtaining reliable and experienced personnel rather than economic pressures. However, its response to this need incorporated staffing other than just the hiring of additional full-time, and consequently more costly, firefighters. The department economizes its personnel by maintaining staffing for the majority of its emergency response needs and relying on assistance from neighboring departments for extraordinary situations. A major corollary benefit of using part-time personnel is the opportunity to evaluate their suitability for future full-time employment.

Staffing in the Private Sector

Examining the private sector, Lewis and Molloy (1991) found labor was the single greatest expense for many organizations and the cost of a full-time staff was "awesome" (p. 16). They recognized labor was no longer cheap or plentiful while, at the same time, competition, volatile markets and changing demographics forced management to rethink staffing practices in order to cut expenses. They concluded economic pressures were the impetus behind the emergence of

what they called the contingent workforce, i.e., part-time, contract and temporary employees. These dramatically increasing non-traditional working arrangements were changing the workplace (pp. 1-2).

The typical model for this postindustrial work force includes a stable core of permanent workers surrounded by rings of temporary, part-time, contract, and other “no strings attached” workers. These peripheral rings compose a work force that can be expanded, contracted, or redeployed according to the shifting needs of the company. This elastic outer ring also buffers regular workers against the shock of downturn or recession. (pp. 2-3)

They found 90% of companies used regular part-time workers (p. 138). Lewis and Molloy also found cost savings in the use of part-time employees. Although part-time and full-time hourly wages were similar, benefits provisions were not (p. 124). The authors also identified an additional benefit to non-traditional staffing arrangements in that they give both employers and employees opportunity to assess skills and aptitudes to determine whether there is a good match that could lead to permanent employment (p. ix).

A Large Corporation's Answer to the Staffing Problem

In an interview to discover how a large private sector corporation managed an unchanging workload in the face of a decreasing budget, J. W. Matuch, chief of the Goodyear Police Department (personal communication, April 4, 2008) summarized how his organization responded to this challenge over the past 20 years. Goodyear Police protects the employees, visitors and physical plant of The Goodyear Tire and Rubber Company's Akron, Ohio, facilities. These facilities include the \$20 billion, international company's corporate headquarters, and primary research and development assets, and house almost 3,000 employees. In 1988 the department employed 49 full-time officers who provided around-the-clock protection for the

Akron plant and served as the headquarters point of contact for Goodyear security issues worldwide.

Like most private companies Goodyear experienced financial challenges caused by increased global competition and market volatility, both in the United States and internationally. The company was forced to examine potentials for cost savings, including in its employee practices. Goodyear Police, like its public sector counterparts, had a budget composed overwhelmingly of personnel costs and could not meet the company's demands to reduce expenses without altering daily staffing and/or the composition of its workforce. At the same time, the overall make-up of the company's Akron facilities and workforce did not change significantly, and the workload of its police department did not diminish.

Goodyear Police initially responded by increasing its use of technology. Whereas previously each portal to the Akron facilities had required an officer for control, video cameras and remote control of gates and doors allowed one officer to monitor and to control access at multiple points of entry. At certain portals, keycard entry systems entirely eliminated the need for officer control. These changes allowed the department in 1988 and 1991 to reduce its daily staffing and total workforce through early-separation programs, reassignment of officers to other positions in the company and layoffs. From 1998 to 2004, the department augmented its police officers with an intern program for criminal justice students at the nearby Akron and Kent State Universities. The company for most of its 100-year history had used intern programs in other departments, but never before in its police department. The interns were paid \$8 an hour, much lower than the rate for a regular officer. The only other associated costs the company incurred were social security and workers compensation taxes. At its peak, the program employed 16 interns and, in addition

to saving the company money, gave the department opportunity to evaluate them for possible regular employment.

The company, however, wanting to reduce the number of direct Goodyear employees, even non-traditional ones, discontinued the program in 2004. To continue to meet the safety and security needs of the Akron facility, while at the same time reducing police payroll, the company contracted with a private security company to provide 31 guards to replace Goodyear officers. Voluntary separations, reassignments and layoffs then reduced the police department to 10 officers by 2008. These remaining officers supervise the contracted guards, fill sensitive and specialized security positions, and generally serve as the on-the-spot decision makers for corporate security issues. The contracted guard force has also provided part-time employment for retired Goodyear officers, allowing the company to continue to benefit from their knowledge and experience.

Goodyear Police's challenge to reduce personnel costs while maintaining levels of service critical to the corporation was addressed initially by adopting the use of modern technology, thus reducing the need for officers. As financial pressure increased, the department turned to the non-traditional workforce of contract employees and interns to augment its own officers, eventually settling on a mix of its own officers and guards hired on contract.

Summary

Review of the literature revealed that reconciliation of workload demand with budget pressure is not a challenge unique to East Cleveland Fire Department, but is shared by the entire fire service and, indeed, the whole of local government. The private business sector, including large corporations, also faces the same problem. Many organizations, both public and private, have adopted staffing alternatives to the traditional full-time workforce. These alternatives include

part-time, contracted, temporary and intern employees. The fire service, in addition to using non-traditional employees, particularly has developed staffing arrangements that rely on mutual cooperation between departments to meet periods of extraordinary need for increased numbers of personnel without the associated financial costs of large permanent staffs. These mutual aid and automatic response schemes ensure staffing adequate to community emergency response needs, more fully utilize on-duty personnel and benefit all participating departments, while making the most efficient use of taxpayer dollars. Regardless of the staffing arrangement and its relation to available funding, in the public sector community views must be consulted when determining an acceptable level of service. These findings from the literature pointed to the need to determine more particularly the standard of fire department staffing in East Cleveland's metropolitan area and the East Cleveland community's capacity for the financial support of its fire department.

Procedures

The obtaining of information regarding the East Cleveland area's standard of fire department staffing and the willingness of the community to pay for staffing required original research. I intended to conduct three surveys, but administered only one, for reasons set forth below. The completed survey was a canvass of the 51 fire departments serving 59 local communities in East Cleveland's county of Cuyahoga to obtain information on their daily staffing, use of part-time firefighters and use of automatic response agreements. The literature review suggested this information could be useful in addressing East Cleveland's staffing problem. This sample group provided the full range of department types and sizes from small, volunteer to large, career, and represented entirely the standards of staffing within the communities of Ohio's largest metropolitan area. With three exceptions, on the dates of January 25, February 8, February 20 and February 23, I spoke by phone with each department's on-duty shift commander, who would

be knowledgeable about the department's staffing. I used a phone survey, rather than a mail survey, to obtain a response rate of 100%. In the first exception I spoke to the dispatcher for the Village of Gates Mills, which has an all-volunteer fire department and consequently did not have on-duty personnel at the station. In the second exception I spoke to a colleague who was a former firefighter from the Chagrin Falls department. In the third exception I spoke to a colleague who was a former Cleveland firefighter, had been a chief's aide and was intimately knowledgeable about Cleveland's scheduling.

I posed the same series of three closed-ended questions to all respondents. Depending upon their answers to the first three questions, I posed three additional closed-ended questions.

1. Does your department have a minimum daily staffing?
2. Does your department use part-time firefighters?
3. Does your department have automatic response agreements with other departments? An automatic response is one in which units from another department are automatically sent along with your department as part of the initial dispatch for a report of a building fire.

If the answer to the first question was yes, I asked the following two questions.

4. What is the minimum number of firefighters on duty each day?
5. Is the minimum number established by department policy or by union contract?

If the answers to the first and second questions were both yes, I asked the following question.

6. Do the part-time firefighters count toward the minimum daily staffing number?

The second survey, which I intended to distribute to a random sample of registered voters, but did not, was to gauge the East Cleveland community's desired level of fire department service and its willingness to pay for that level. The third survey, also not conducted, I intended to give

to the East Cleveland mayor and the five council members (all elected) to obtain their views regarding fire department service and their willingness to support it financially.

Results

Cuyahoga County, Ohio, Fire Departments Staffing Survey

By conducting a telephone survey, I was able to obtain a response rate of 100% (see Appendix). Of the 51 departments in the county, 49 (96%) have a daily minimum staffing, ranging from 2 to 25 firefighters. Of the two departments that do not have a minimum, Cleveland, the largest department, does not schedule in terms of total daily staffing, but rather in terms of companies in service. Gates Mills is entirely a volunteer department with no station manning. Of those with minimum staffing, only seven (14%) staff enough firefighters on duty to meet the NFPA 1710 standard without calling on another department for help. Since the survey, Cleveland Heights for financial reasons has reduced its minimum staffing from 18 to 17.

Of the departments that have minimum daily staffing, 44 (90%) administer it as department policy. Only four (8%) have labor agreements with their unions that set the minimum number. Interestingly, Pepper Pike's minimum is established by city ordinance.

Departments using no part-time firefighters number 30 (59%), while departments using part-time firefighters along with career members total 12 (24%). Departments with only part-time staff number eight (16%) and one department is exclusively volunteer. Of the 20 departments using part-time staff for station duty, only East Cleveland does not use the part-time members to meet its minimum staffing number.

Departments with an automatic response arrangement number 31 (61%), although certain of these agreements are not jurisdiction-wide, but for only particular occupancies or geographic areas. Departments using part-time firefighters are more likely to have automatic response

agreements than those made up entirely of full-time staff. Of the 20 departments using part-time firefighters, 15 use automatic response. Of the 30 departments not using part-time firefighters, 16 use automatic response. The use of automatic response appears unrelated to daily staffing numbers. Although the largest department (Cleveland) does not use automatic response, the second largest (Parma) does. Of the four departments with the smallest daily staffing, three use automatic response and one does not. Of the seven departments staffing enough firefighters to meet NFPA 1710, four also have automatic response agreements. The table below summarizes the survey findings.

Table: Cuyahoga County, Ohio, Fire Departments Staffing Survey Summary (n = 51)

Department Staffing Composition

All full-time	30
Combination full-time/part-time	12
All part-time	8
All volunteer (no station staffing)	1

Departments with Minimum Daily Staffing (n = 49)

Established by department policy	44
Established by labor agreement	4
Established by city ordinance	1
Complying with NFPA 1710	7
Using part-time firefighters to meet staffing minimum	19

Departments with Automatic Response Agreements (n = 31)

Using part-time firefighters	15
Not using part-time firefighters	16

Registered Voter and Elected Officials Surveys

After review of the recent history of East Cleveland's taxation and its tax base, and discussion with the acting fire chief, I decided the community survey, a main purpose of which was to gauge residents' willingness to pay for fire department service and would involve questions regarding taxation and fees, would be too politically incendiary to distribute. I regarded the third survey, which was to obtain similar information from East Cleveland's elected government officials, would have value equal to the residents survey, as the elected officials are the representatives of the people. As reported by the acting fire chief, however, the mayor denied me permission to distribute this survey because of the sensitivity of the department staffing and funding topics. This response, though, was itself informative, as discussed below.

*Discussion**Staffing Cost Factors*

Personnel compensation constitutes an average 88% of total expenses for fire departments serving communities the size of East Cleveland (Moulder, 2006). This fact is not surprising given the fire service's labor-intensive role as part of the local government service industry (England et al., 2007). East Cleveland Fire, however, is out of step with this national average, spending a greater portion (as much as 97%) of its budget on personnel compensation, leaving less money for other department needs. This high cost for personnel is not driven by the wages of the individual East Cleveland firefighter, who is significantly underpaid compared to area counterparts, but by the total number of full-time firefighters East Cleveland employs and a minimum daily staffing clause in the department's labor agreement. Moulder stated communities East Cleveland's size average 1.49 full-time firefighters per 1,000 population. This finding suggests East Cleveland should have about 38 full-time firefighters instead of the 53 currently

authorized by ordinance. Also, bound by the contract's minimum daily staffing clause, East Cleveland has little room to adjust either overall or daily staffing to match available revenue. However, Lewis and Molloy (1991), Greenshields (2002), Moulder, and Scott et al. (2005) all recognize the legitimacy of adjusting the number and composition of an organization's staffing to control costs. Goodyear, which for financial reasons reduced its police force by 80% by using technology, reassignments and outsourcing, is a good example of a private sector response to the need to decrease personnel costs.

East Cleveland Fire has not established its current daily staffing level through any rational process balancing staffing need with available financial resources. It has not determined, as Lewis and Molloy (1990) phrased it, the fewest number of individuals needed to run its worksite effectively and efficiently. Rather, the daily minimum staffing number incorporated into the union contract over two decades ago was inherited from an era when the department's workload was much less and municipal finances were much better. Although the department's increased workload and the city's decreased revenue called for rational evaluation of fire staffing and its effect on community safety, the debate instead was dominated by management/labor conflict, grievances and legal action. The union representing the firefighters worked primarily to improve the economic and working conditions of its members, rather than the welfare of the community's citizens. If it were solely concerned about staffing from the standpoint of service and community safety, it would not have sued to prevent East Cleveland from hiring part-time firefighters. As it now stands, East Cleveland's daily minimum staffing and its limited use of part-time personnel are still controlled by the union contract, and therefore are not easily amenable to the city's financial condition, which is incontrovertibly dire.

This staffing clause in the labor contract, more than any other cause, influences East

Cleveland's personnel expenses compared to the other 50 fire departments in its area, only three of which have contractual minimum daily staffing standards. This clause not only compels East Cleveland to have a certain number of full-time firefighters on duty each day, paying overtime if necessary, but has the indirect result of determining how many full-time firefighters East Cleveland needs to employ overall. The overwhelming majority of fire departments set a minimum daily staffing number, but it is controlled through policy, and therefore exclusively by management. Also, of the 24% of area fire departments employing both full-time and part-time personnel, none other than East Cleveland makes a distinction between the two when it comes to minimum daily staffing. Only East Cleveland's labor agreement regards a firefighter working part-time as a lesser employee. This philosophy is out of step with the nation's fire service, only 8% of whose departments are staffed entirely with career members, according to NFPA (2006). Indeed, one can say the non-career firefighter is the backbone of the nation's fire service.

Lewis and Molloy (1991) recognize the financial savings realized by the employment of part-time workers. Scott et al. (2005) particularize this recognition for the fire service. Lewis and Molloy also point out the benefit of using part-time employment to evaluate potential full-time hires. The experiences of the Goodyear Police and Fairlawn Fire departments confirm the value of this practice. The research brought out this unexpected corollary benefit to part-time hires.

Staffing Need

As Coleman (2007, January) summed it, the fire service has never developed a rule of thumb for adequate fire protection. NFPA 1710 attempts to do so by identifying the tasks to be accomplished at a building fire and the number of firefighters needed to accomplish each one. NFPA totals these tasks to determine the response needed for an initial full alarm assignment. NFPA also establishes standards regarding individual company staffing and response times.

However, it allows the use of mutual aid and automatic response agreements to meet its response standard. Only seven fire departments in East Cleveland's metropolitan area staff enough personnel daily to meet NFPA response standards without calling on another department for help. All departments in the county participate in mutual aid. Additionally, the majority, but not East Cleveland, use automatic response. Automatic response agreements have an advantage over mutual aid in that assisting departments dispatch help with the initial alarm rather than waiting to be called. The fire service standard, even for departments employing full-time personnel, is not to staff personnel enough on a daily basis to meet NFPA standards.

As noted above, East Cleveland's daily staffing has not evolved through any rational process seeking to balance community need with community financial assets. Rather the process has played out in the environment of union negotiations, arbitration hearings and courtrooms. Regardless of the adequacy of funding, East Cleveland's citizens, through their elected representatives, must regain the fundamental right of management to determine the adequacy of, and to schedule, the workforce.

The Likelihood of Increased Funding

The inability to assess the opinions of the citizenry and its elected officials was a prima facie disappointment of the research. A closer look, however, at the reason for that inability actually answers the question to be posed by the surveys, i.e., is the East Cleveland community willing to pay more for its fire service? The poverty of a third of the city's residents, the elected officials' understandable concern about the ability of the community to absorb higher taxes and the voice of the people in repealing a water rate hike all emphatically state the city must live financially within the means currently provided. What, then? Must East Cleveland citizens be satisfied with a second-rate fire service? Not in the least, but the message is clear: Get better results from the

dollars provided. In order to do so, East Cleveland Fire must look to the examples of its peers in the use of automatic response agreements and part-time firefighters. Together these changes would enable East Cleveland Fire to staff, both overall and on a daily basis, based upon a reasonable balance of community need and available funding.

Recommendations

First, East Cleveland must eliminate the minimum staffing clause from its labor agreement. This elimination would restore to the citizens, through their elected officials, the ability to determine the overall and daily staffing of their fire department.

Second, East Cleveland must conclude automatic response agreements with nearby fire departments. These agreements would ensure the community's safety through an adequate fire response in line with NFPA standards. The agreements would also minimize the number of firefighters needed for duty each day, thus holding down costs.

Third, East Cleveland must include part-time firefighters in the composition of its staffing. Although the amount of financial savings would depend on the hourly cost of the part-timers compared to that of full-time firefighters, and the number of part-time employees used, the use of part-time firefighters would reduce the city's need for more expensive full-time employees and give it the opportunity to achieve the best balance between staffing needs and available funds.

These recommendations, essentially pointing to the reverse transitioning of a long-time, career, urban fire department, might be regarded as heresy by the professional fire service. However, no organization, especially in the older, urban areas traditionally served by career departments, is immune from financial pressure. If these departments looked at their own opportunities for part-time firefighters and automatic response, they no doubt would find a in them a means to improve service to their communities without increases in funding.

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Appendix

Cuyahoga County, Ohio, Fire Departments Staffing Survey

FT = full-time firefighters PT = part-time firefighters N/A = not applicable

<u>Department</u>	<u>Staffing</u>	<u>Daily Minimum</u>	<u>Automatic Response</u>
Bay Village	FT	5 (policy)	No
Beachwood	FT	9 (policy)	No
Bedford	FT	6 (policy)	Yes
Bedford Heights	FT	5 (policy)	Yes
Berea	FT	5 (policy)	Yes
Brecksville	FT/PT	5 (policy)	Yes
Broadview Heights	FT/PT	6 (policy)	No
Brook Park	FT	9 (contract)	Yes
Brooklyn	FT/PT	7 (policy)	No
Brooklyn Heights	PT	3 (policy)	Yes
Chagrin Falls	FT/PT	4 (policy)	Yes
Cleveland	FT	N/A	No
Cleveland Heights	FT	18 (policy)	Yes
Cuyahoga Heights	FT	6 (policy)	Yes
East Cleveland	FT/PT	12 (contract)	No
Euclid	FT	16 (policy)	No
Fairview Park	FT	6 (policy)	No
Garfield Heights	FT	8 (policy)	No
Gates Mills	Volunteer	N/A	No

Cuyahoga County, Ohio, Fire Departments Staffing Survey (continued)

FT = full-time firefighters PT = part-time firefighters N/A = not applicable

<u>Department</u>	<u>Staffing</u>	<u>Daily Minimum</u>	<u>Automatic Response</u>
Highland Heights	FT/PT	4 (policy)	Yes
Highland Hills	PT	2 (policy)	Yes
Independence	FT/PT	5 (policy)	Yes
Lakewood	FT	24 (policy)	No
Lyndhurst	FT	6 (policy)	No
Maple Heights	FT	8 (contract)	No
Mayfield	FT/PT	4 (policy)	No
Mayfield Heights	FT	7 (policy)	Yes
Middleburg Heights	FT	5 (policy)	No
Newburgh Heights	PT	2 (policy)	No
North Olmsted	FT	10 (policy)	Yes
North Randall	PT	2 (policy)	Yes
North Royalton	FT	8 (policy)	No
Oakwood	PT	4 (policy)	Yes
Olmsted	FT	4 (policy)	No
Olmsted Falls	FT/PT	3 (policy)	Yes
Orange	PT	2 (policy)	Yes
Parma	FT	25 (contract)	Yes
Parma Heights	FT	6 (policy)	No
Pepper Pike	FT/PT	4 (ordinance)	Yes

Cuyahoga County, Ohio, Fire Departments Staffing Survey (continued)

FT = full-time firefighters PT = part-time firefighters N/A = not applicable

<u>Department</u>	<u>Staffing</u>	<u>Daily Minimum</u>	<u>Automatic Response</u>
Richmond Heights	FT/PT	5 (policy)	Yes
Rocky River	FT	6 (policy)	Yes
Seven Hills	PT	5 (policy)	Yes
Shaker Heights	FT	16 (policy)	Yes
Solon	FT	13 (policy)	Yes
South Euclid	FT	7 (policy)	Yes
Strongsville	FT	15 (policy)	Yes
University Heights	FT	7 (policy)	Yes
Valley View	FT/PT	6 (policy)	Yes
Warrensville Heights	FT	6 (policy)	No
Westlake	FT	9 (policy)	Yes
Woodmere	PT	6 (policy)	Yes